



PDS Atmospheres Node Report

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Content

Mission Efforts

Jupiter

Saturn

Mars

Venus

Survey

Community use of tools

Platforms used

Jupiter Data Archive Page

Page set up to respond to JDAP AO

Referred to other nodes

Referred to tools

Linked to Small Bodies -New Horizons

Some higher order products to allow the New Horizons data to be placed in context were posted as conditional data sets

- Cassini - high resolution maps -Vasavada/Vicar +IDL reader

- Galileo - mapped, calibrated data cubes - Gierasch

 - UVS/EUV - Simmons

 - IRTF ground support - Orton

- Voyager 1&2 Atmospheric maps

- Maui & Tortugas ground-based images

Cassini Archive

April 1 delivery on track

Questions concerning Titan cartography are being discussed.

Pappalardo will replace Matson as Project Scientist

Pappalardo is interested in increasing access to Cassini data

We will work with him to assess possibilities.

We will follow up with Denis Bogan on data products from CDAP 07 & 08

The Mars Data

The Archive page is the portal for not only the fully archived data sets, but also for data sets currently under review

One can find links to not only data located at the Atmospheres node but relevant data at other nodes, e.g. the Mars Pathfinder Imager data, which is housed at the Imaging node

Accessible data sets range from the Mariner 9 and Viking lander sets, to the MRO accelerometer data sets (which are currently under peer review).

Missions included are the Mars Reconnaissance Orbiter, the Mars Exploration Rovers, Mars Odyssey, Mars Global Surveyor, Mars Pathfinder, the Viking landers, and Mariner 9.

The Mars Data (cont.)

There is also access to the Ames Mars General Circulation Model Data Record and the archive of the albedo, thermal inertia, and topography datasets.

Among the tools available for users is a TES data search program, in which one can search that data archive by UT date, Martian year, or Ls, in order to find what is available.

Future plans include extending this search capability to other data sets, and making an over-all table which will show what data is available for any given Ls.

Venus Express Activities

PDS/ATM representatives (Reta and Nancy) attended the VEX DAWG at ESTEC in Dec. 2007; participated in discussions with data providers

Participated in VEX Data Review from January 2008 to present (Chair: David Heather (ESA/PSA), Co-Chairs: Nancy Chanover (PDS/ATM) and Patrick Martin (ESA/ESOC))

Talked with David Heather (ESA/PSA) about data formats in Dec. 2007

Set up protocol for retrieving Huygens index files from PSA (Huygens data are a proxy until VEX data go online)

Front end web page under development

Will send interoperability plan to IPDA project for review & discussion in 1-2 weeks

Survey Effort - Text

Please help me contact the newer members of our atmospheric sciences community. I'm trying to assess what the real data analysis needs of our community are and what we can do at the PDS Atmospheres Discipline node to address them.

Could you answer the following questions and forward this message to others (colleagues, Postdocs and students). Please cc me so that I can develop a representative group of our community to communicate with in order to improve data access?

What system do you use for data reduction and analysis? (Examples: SUN, PC-window, PC-linux, MAC.)

What analysis tools do you apply? (Examples: IDL, IRAF, ISIS, homegrown, etc.)

What planetary data sets (both inside and outside the PDS) do you utilize? (Example: Cassini VIMS, Galileo SSI, etc.)

Survey Effort - Preliminary Results

Sent out 84 selected emails March 13

Received 38 responses by April 1 by initial candidates

Received 56 secondary responses by April 1

Will analyze for systems used later (have a similar trend)

Have preliminary analysis of tools (next slide)

Will use “datasets used” to generate “expert user groups” to help us peer review and improve access to atmospheric data.

Analysis Tools - Preliminary Results

From a total of 94 responses

11 primaries just passed it on

57 cited IDL as their main tool

10 homegrown

10 Fortran

8 Matlab

5 ISIS

4 ENVI

3 Vicar

Survey Effort - results

From Nick Schneider - March 24, 2008

Obtained from Karla Peterson and Brett Blacker at STScI

“This allows us to make a snap shot of what our users have on their desk these days (and compare it to the past):”

OS	2003	2004	2005	2006	2007	2008
Linux	37.5	42.2	40.8	40.0	36.8	30.1
SunOS	33.4	26.7	14.2	11.2	8.2	4.8
Windows	13.3	14.7	11.6	12.8	13.3	12.0
Mac OS X	8.5	13.3	33.4	34.5	39.5	51.2